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Ireland

INDUSTRIAL EMISSIONS LICENCE
Recommended Determination

Licence Register Number:	P1069-01
Company Register Number:	16517
Applicant:	William Connolly & Sons Unlimited Company
Location of Installation:	Grange Lower Goresbridge County Kilkenny

INTRODUCTION

This introduction is not part of this licence and does not purport to be a legal interpretation of this licence.

William Connolly & Sons Unlimited Company have operated an animal feed mill at the Goresbridge site since 1967. Feed is manufactured at the installation predominantly for the equine, dairy, cattle, sheep, pig, poultry and small animal industries. The installation has a capacity to operate 24 hours a day, 7 days a week but operates below this for much of the year outside of the main harvesting period. The installation currently has capacity to produce up to 200,000 tonnes per year of animal feed and employs approximately 100 people, with additional employment during the harvest period. It also has its own dedicated maintenance garage and refuelling area to service its haulage fleet and mobile plant.

There are 45 main emissions to air from the installation consisting of two main boilers and 43 emissions to air from grain processing activities. The production of feed is predominantly a dry activity with steam required to condition the product and therefore there are no process emissions to water. All stormwater from the installation will pass through a silt trap and Class I bypass separator before discharging to an appropriately sized 7-cell integrated constructed wetland (ICW), which discharges to the neighbouring River Barrow. The ICW within the installation boundary is located within the River Barrow & River Nore SAC (002162). The outflow from the ICW will be controlled and will discharge via an inspection chamber and shut-off valve.

The installation falls within the scope of:

Category 6.4 (b) Treatment and processing, other than exclusively packaging, of the following raw materials, whether previously processed or unprocessed, intended for the production of food or feed from:

(iii) animal and vegetable raw materials, both in combined and separate products, with a finished product production capacity in tonnes per day greater than:

- 75 if A is equal to 10 or more; or
- $[300 - (22.5 \times A)]$ in any other case,

Where 'A' is the portion of animal material (in percent of weight) of the finished product production capacity.

This licence sets out in detail the conditions under which William Connolly & Sons Unlimited Company will operate and manage this installation.

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Glossary of Terms

All terms in this licence should be interpreted in accordance with the definitions in the Environmental Protection Agency Act 1992 as amended, unless otherwise defined in the glossary.

Accident	For the purpose of this licence an accident means an unplanned event that may result in pollution.
Adequate lighting	20 lux measured at ground level.
AER	Annual Environmental Report.
Approval	Approval in writing/electronically.
Annually	All or part of a period of twelve consecutive months.
Application	The application by the licensee for this licence.
Appropriate Facility	A waste management facility or installation, duly authorised under relevant law and technically suitable.
Attachment	Any reference to Attachments in this licence refers to attachments submitted as part of this licence application.
BAT	Best Available Techniques (BAT) as described in the Commission Implementing Decision (CID) 2019/2031 of 12 November 2019 establishing best available techniques (BAT) conclusions for the Food, Drink and Milk Industries (2019/2031) under Directive 2010/75/EU of the European Parliament and of the Council (FDM CID). Reference to BAT numbers in the conditions of this licence are references to the BAT Conclusions according to how they are numbered in the aforementioned CID.
BAT conclusions	A document containing the parts of a BAT reference document laying down the conclusions on best available techniques, their description, information to assess their applicability, the emission levels associated with the best available techniques, associated monitoring, associated consumption levels and, where appropriate, relevant site remediation measures.
BAT reference document	A document drawn up by the Commission of the European Union in accordance with Article 13 of the Industrial Emissions Directive, resulting from the exchange of information in accordance with that Article of that Directive and describing, in particular, applied techniques, present emissions and consumption levels, techniques considered for the determination of best available techniques as well as BAT conclusions and any emerging techniques.

Biannually	At approximately six – monthly intervals.
Biennially	Once every two years.
BOD	5 day Biochemical Oxygen Demand (without nitrification suppression).
CEN	Comité Européen De Normalisation – European Committee for Standardisation.
COD	Chemical Oxygen Demand.
Compliance Point	The point (location, depth) at which a compliance value should be met. Generally, it is represented by a borehole or monitoring well from which representative groundwater samples can be obtained.
Compliance Value	The concentration of a substance and associated compliance regime that, when not exceeded at the compliance point, will prevent pollution and/or achieve water quality objectives at the receptor.
Containment boom	A boom that can contain spillages and prevent them from entering drains or watercourses or from further contaminating watercourses.
CRO Number	Company Register Number.
Daily	During all days of plant operation and, in the case of emissions, when emissions are taking place; with at least one measurement on any one day.
Day	Any 24-hour period.
Daytime	0700hrs to 1900hrs.
dB(A)	Decibels (A weighted).
Diffuse Emissions	Non-channelled emissions which can result from ‘area’ sources (e.g. tanks) or ‘point’ sources (e.g. pipe flanges).
DO	Dissolved oxygen.
Documentation	Any report, record, results, data, drawing, proposal, interpretation or other document in written or electronic form which is required by this licence.
Drawing	Any reference to a drawing or drawing number means a drawing or drawing number contained in the application, unless otherwise specified in this licence.
Emission limits	Those limits, including concentration limits and deposition rates, established in <i>Schedule B: Emission Limits</i> , of this licence.

EMP	Environmental Management Programme.
EMS	Environment Management System. The aspect of the organisation's overall management structure that addresses immediate and long-term impacts of its products, services and processes on the environment.
Environmental damage	As defined in Directive 2004/35/EC.
EPA	Environmental Protection Agency.
Evening Time	1900hrs to 2300hrs
Facility	Any site or premises used for the purpose of the recovery or disposal of waste.
Fortnightly	A minimum of 24 times per year, at approximately two-week intervals.
Gas Oil	Gas oil as defined in DIRECTIVE (EU) 2016/802 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 11 May 2016 relating to a reduction in the sulphur content of certain liquid fuels.
GC/MS	Gas chromatography/mass spectroscopy.
Groundwater	Has the meaning assigned to it by Regulation 3 of the European Communities Environmental Objectives (Groundwater) Regulations 2010 (S.I. No. 9 of 2010), as amended.
ha	Hectare.
Hazardous Substances	Substances or mixtures as defined in Article 3 of Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures.
Heavy metals	This term is to be interpreted as set out in "Parameters of Water Quality, Interpretation and Standards" published by the Agency in 2001. ISBN 1-84095-015-3.
Hours of operation	The hours during which the installation is authorised to be operational.
ICP	Inductively coupled plasma spectroscopy.
IE	Industrial Emissions.

IFI	Inland Fisheries Ireland
Incident	The following shall constitute an incident for the purposes of this licence: <ul style="list-style-type: none">(i) an emergency;(ii) any emission which does not comply with the requirements of this licence;(iii) any malfunction or breakdown of key environmental abatement, control or monitoring equipment;(iv) any trigger level specified in this licence which is attained or exceeded;(v) any compliance value specified in this licence which is attained or exceeded;(vi) any indication that environmental pollution has, or may have, taken place.
Industrial Emissions Directive	Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) (Recast).
Installation	A stationary technical unit or plant where the activity concerned referred to in the First Schedule of EPA Act 1992 as amended is or will be carried on, and shall be deemed to include any directly associated activity, which has a technical connection with the activity and is carried out on the site of the activity.
Installation Manager	The licensee or an authorised representative of the licensee with the appropriate seniority and authority to ensure compliance with the licence.
Integrated Constructed Wetland (ICW)	The integrated constructed wetland shall consist of the system and area as per Drawing Number IE 2383-002 (Appendix A of Integrated Constructed Wetland System Report dated 17th November 2021).
Irish Water	Irish Water, Colvill House, 24/26 Talbot Street, Dublin 1.
K	Kelvin.
kPa	Kilopascals.
$L_{Aeq,T}$	This is the equivalent continuous sound level. It is a type of average and is used to describe a fluctuating noise in terms of a single noise level over the sample period (T).
$L_{A,T}$	The Rated Noise Level, equal to the L_{Aeq} during a specified time interval (T), plus specified adjustments for tonal character and/or impulsiveness of the sound.
Licensee	William Connolly & Sons Unlimited Company, Grange Lower, Goresbridge, County Kilkenny, CRO Number: 16517.
Local Authority	Kilkenny County Council.

List of Wastes (LoW)	A harmonised, non-exhaustive list of wastes drawn up by the European Commission and published as Commission Decision 2014/955/EU, as amended by any subsequent amendment published in the Official Journal of the European Community.
Mass flow limit	An emission limit value expressed as the maximum mass of a substance that can be emitted per unit time.
Mass flow threshold	A mass flow rate above which a concentration limit applies.
Monthly	A minimum of 12 times per year, at intervals of approximately one month.
Night-time	2300hrs to 0700hrs.
Noise-sensitive location (NSL)	Any dwelling house, hotel or hostel, health building, educational establishment, place of worship or entertainment, or any other installation or area of high amenity which for its proper enjoyment requires the absence of noise at nuisance levels.
Odour-sensitive location	Any dwelling house, hotel or hostel, health building, educational establishment, place of worship or entertainment, or any other premises or area of high amenity which for its proper enjoyment requires the absence of odour at nuisance levels.
Oil separator	Device installed according to the International Standard I.S. EN 858-2:2003 (Separator system for light liquids, (e.g. oil and petrol) – Part 2: Selection of normal size, installation, operation and maintenance).
Potential emissions	Emissions which take place only under abnormal operating conditions. Examples include emissions from overpressure valves, bursting discs, and emergency generators.
PRTR	Pollutant Release and Transfer Register.
Quarterly	All or part of a period of three consecutive months beginning on the first day of January, April, July or October.
Relevant Hazardous Substances	Those substances or mixtures defined within Article 3 of Regulation (EC) No 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) which, as a result of their hazardousness, mobility, persistence and biodegradability (as well as other characteristics), are capable of contaminating soil or groundwater and are used, produced and/or released by the installation.
SAC	Special Area of Conservation designated under the Habitats Directive, Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.
Sample(s)	Unless the context of this licence indicates to the contrary, the term samples shall include measurements taken by electronic instruments.

Sanitary effluent	Wastewater from installation toilet, washroom and canteen facilities.
Soil	The top layer of the Earth's crust situated between the bedrock and the surface. The soil is composed of mineral particles, organic matter, water, air and living organisms.
SOP	Standard operating procedure.
SPA	Special Protection Area designated under the Birds Directive, Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds.
Specified emissions	Those emissions listed in <i>Schedule B: Emission Limits</i> , of this licence.
Standard method	A National, European or internationally recognised procedure (e.g. I.S. EN, ISO, CEN, BS or equivalent); or an in-house documented procedure based on the above references; a procedure as detailed in the current edition of "Standard Methods for the Examination of Water and Wastewater" (prepared and published jointly by A.P.H.A., A.W.W.A. & W.E.F.), American Public Health Association, 1015 Fifteenth Street, N.W., Washington DC 20005, USA; or an alternative method as may be agreed by the Agency.
Storage	Includes holding of waste.
Storm water	Rain water run-off from roof and non-process areas.
The Agency	Environmental Protection Agency.
TOC	Total organic carbon.
Trade effluent	Trade effluent has the meaning given in the Water Services Act, 2007.
Trigger level	A parameter value, the achievement or exceedance of which requires certain actions to be taken by the licensee.
Waste	Any substance or object which the holder discards or intends or is required to discard.
Water Services Authority	Kilkenny County Council.
Weekly	During all weeks of plant operation and, in the case of emissions, when emissions are taking place; with at least one measurement in any one week.
WWTP	Waste water treatment plant.

Decision and Reasons for the Decision

The Environmental Protection Agency is satisfied, on the basis of the information available, that subject to compliance with the conditions of this licence, any emissions from the activity will comply with and will not contravene any of the requirements of Section 83(5) of the Environmental Protection Agency Act 1992 as amended.

The Agency also considers that the activity will not adversely affect the integrity of any European Site, and has decided to impose conditions for the purposes of ensuring it does not do so. It has determined that the activity/activities, if managed, operated and controlled in accordance with this licence, will not have any adverse effect on the integrity of any of those sites.

The Agency has applied the Commission Implementing Decision (EU) 2019/2013 of 12 November 2019 establishing Best Available Techniques (BAT) Conclusions for the food, drink and milk industries, under Directive 2010/75/EU of the European Parliament and of the Council as a reference when setting licence conditions.

The Agency accordingly proposes to grant a licence to **William Connolly & Sons Unlimited Company** to carry on the activity listed in *Part I, Schedule of Activities Licensed*, subject to the conditions set out in *Part III, Conditions*.

In reaching this decision the Agency has considered the documentation relating to:

- the application, Register Number: P1069-01 and the supporting documentation received from the applicant;
- the submissions received;
- the Inspector's Report dated 20 September 2022;

and has carried out an Environmental Impact Assessment (EIA) Screening and an Appropriate Assessment of the likely significant effects of the activity on European Sites.

EIA, as respects the matters that come within the functions of the Agency, was not required for the activity to which this decision relates due to the following reasons: having considered the information provided by the applicant, the nature, size and location of the activity, it has been determined that the activity is unlikely to give rise to significant effects on the environment.

A screening for Appropriate Assessment was undertaken to assess, in view of best scientific knowledge and the conservation objectives of the site, if the activity, individually or in combination with other plans or projects is likely to have a significant effect on any European Site. In this context, particular attention was paid to the European Site(s) at **River Barrow and River Nore SAC (002162), Blackstairs Mountains SAC (000770), Slaney River Valley SAC (000781), Thomastown Quarry SAC (002252) and River Nore SPA (004233)**.

The activity is not directly connected with or necessary to the management of any European Site and the Agency considered, for the reasons set out below, that it cannot be excluded, on the basis of objective information, that the activity, individually or in combination with other plans or projects, will have a significant effect on any European Site and accordingly determined that an Appropriate Assessment of the activity was required, and for this reason determined to require the applicant to submit a Natura Impact Statement.

This determination is based on the following:

- **The distance and hydrological connection between the installation and at least one European site (River Barrow and River Nore SAC (002162)).**
- **A constructed wetland associated with the activity is located within the River Barrow and River Nore SAC.**
- **Having particular regard to emissions to air and water, which could have potential negative impacts on qualifying interests at a European Site.**

The Agency has completed the Appropriate Assessment of potential impacts on these sites and has made certain, based on best scientific knowledge in the field and in accordance with the European Communities (Birds and Natural Habitats) Regulations 2011 as amended, pursuant to Article 6(3) of the Habitats

Directive, that the activity, individually or in combination with other plans or projects, will not adversely affect the integrity of any European Site, in particular **River Barrow and River Nore SAC (002162)**, **Blackstairs Mountains SAC (000770)**, **Slaney River Valley SAC (000781)**, **Thomastown Quarry SAC (002252)** and **River Nore SPA (004233)**, having regard to their conservation objectives and will not affect the preservation of these sites at favourable conservation status if carried out in accordance with this licence and the conditions attached hereto for the following reasons:

- Condition 5 specifies that emissions shall be made from specified emission points set out in *Schedule B: Emission Limits*, of this licence and subject to emission limit values specified in that Schedule;
- *Schedule C: Control and Monitoring*, of this licence sets out the monitoring requirements for emissions to air, noise emissions, ambient dust emissions and stormwater discharges, and control and monitoring of the ICW;
- Air dispersion modelling demonstrates that emissions to air from the installation will not result in ground level concentrations, which exceed air quality standards, beyond the installation boundary or standards for the protection of vegetation or ecosystems at the River Barrow and River Nore SAC;
- This licence requires the ambient monitoring of dust to confirm the absence of impact from the air emissions in the ambient environment and ensure continued protection of qualifying interests of any European Site.
- With regard to the European Sites which are hydrologically connected to the installation, there are no process emissions to surface water associated with the activity on-site;
- All stormwater discharges, other than from roofs, shall pass through silt traps and oil separators prior to discharge to the ICW. The ICW shall be maintained in accordance with Condition 3 to protect the receiving waters;
- Condition 6 of the licence requires trigger levels to be established and maintained for SW1A to ensure that discharges of storm water will not negatively impact water quality and the continued protection of water dependent species;
- *Schedule C.5: Ambient Monitoring* of this licence requires biological and chemical monitoring of the River Barrow adjacent to the installation boundary.
- *Schedule B.4: Noise Emission*, of this licence stipulates noise ELV's of 55dB(A) $L_{Ar,T}$ (daytime), 50dB(A) $L_{Ar,T}$ (evening-time) and 45dB(A) $L_{Aeq,T}$ (night-time) at noise sensitive locations, to ensure that noise emissions from the installation will not negatively impact on the surrounding environment, including qualifying interests such as the Otter at the neighbouring SAC;
- Noise emission modelling demonstrates that emissions of noise from the installation will remain below standard noise limits at noise sensitive locations and at the boundary of the River Barrow and River Nore SAC;
- Condition 6 of the licence requires a noise management plan, to include a noise reduction programme, to be prepared and implemented.
- The licence includes standard conditions in relation to storage and management of materials and wastes; and
- Condition 9 of the licence requires the applicant to ensure that a documented Accident Prevention Procedure is in place that addresses the hazards on-site, particularly in relation to the prevention of accidents with a possible impact on the environment.

The Agency is satisfied that no reasonable scientific doubt remains as to the absence of adverse effects on the integrity of those European Sites **River Barrow and River Nore SAC (002162)**, **Blackstairs Mountains SAC (000770)**, **Slaney River Valley SAC (000781)**, **Thomastown Quarry SAC (002252)** and **River Nore SPA (004233)**.

Part I Schedule of Activities Licensed

In pursuance of the powers conferred on it by the Environmental Protection Agency Act 1992 as amended, the Agency proposes to grant this Industrial Emissions licence to:

William Connolly & Sons Unlimited Company, Grange Lower, Goresbridge, County Kilkenny and CRO Number 16517

under Section 83(1) of the said Act to carry on the following activity:

7.8 (a) The treatment and processing, other than exclusively packaging, of the following raw materials, whether previously processed or unprocessed, intended for the production of food or feed from:

(iii) animal and vegetable raw materials, both in combined and separate products, with a finished product production capacity in tonnes per day greater than:

(I) 75 if A is equal to 10 or more; or

(II) $[300 - (22.5 \times A)]$ in any other case,

Where 'A' is the portion of animal material (in percent of weight) of the finished product production capacity.

at **Grange Lower, Goresbridge, County Kilkenny**, subject to the following twelve Conditions, with the reasons therefor and associated schedules attached thereto.

Part II Schedule of Activities Refused

None of the proposed activities as set out in this licence application have been refused.

Part III Conditions

Condition 1. Scope

- 1.1 Industrial Emissions Directive activities at this installation shall be restricted to those listed and described in *Part I Schedule of Activities Licensed* and shall be as set out in the licence application or as modified under Condition 1.4 of this licence and subject to the conditions of this licence.
- 1.2 The licensee shall carry on the licensed activity in accordance with the limitations set out in *Schedule A: Limitations* of this licence.
- 1.3 For the purposes of this licence, the installation authorised by this licence is the area of land outlined in red on Drawing No. **01, Revised Red Line Boundary dated 25/11/2021** of the application. Any reference in this licence to “installation” shall mean the area thus outlined in red. The licensed activity shall be carried on only within the area outlined.
- 1.4 No alteration to, or reconstruction in respect of, the activity, or any part thereof, that would, or is likely to, result in
- (i) a material change or increase in:
- the nature or quantity of any emission;
 - the abatement/treatment or recovery systems;
 - the range of processes to be carried out;
 - the fuels, raw materials, intermediates, products or wastes generated, or
- (ii) any changes in:
- site management, infrastructure or control with adverse environmental significance,
- shall be carried out or commenced without prior notice to, and without the approval of, the Agency.
- 1.5 The installation shall be controlled, operated and maintained, and emissions shall take place as set out in this licence. All programmes required to be carried out under the terms of this licence become part of this licence.
- 1.6 This licence is for the purpose of licensing under the EPA Act 1992 as amended only and nothing in this licence shall be construed as negating the licensee’s statutory obligations or requirements under any other enactments or regulations.

Reason: *To clarify the scope of this licence.*

Condition 2. Management of the Installation

- 2.1 Installation Management
- 2.1.1 The licensee shall employ a suitably qualified and experienced installation manager who shall be designated as the person in charge. The installation manager or a nominated, suitably qualified and experienced deputy shall be present on the installation at all times during its operation or as otherwise required by the Agency.
- 2.1.2 The licensee shall ensure that personnel performing specifically assigned tasks shall be qualified on the basis of appropriate education, training and experience as required and shall be aware of the requirements of this licence.

2.2. Environmental Management System (EMS)

2.2.1. The licensee shall **establish, maintain and implement** an Environmental Management System (EMS), which shall incorporate **the features specified in BAT 1**, within six months of the date of grant of this licence. The EMS shall be reviewed by senior management for suitability, adequacy and effectiveness and updated on an annual basis.

2.2.2. The EMS shall include, as a minimum, the following elements:

2.2.2.1. A statement of the commitment, **leadership and accountability** of management, including senior management for the implementation of an effective EMS.

2.2.2.2. An environmental policy, defined by Management, that includes a commitment to continuous improvement of the environmental performance of the installation.

2.2.2.3. Management and Reporting Structure and responsibility for environmental aspects, including for the planning and provision of financial and human resources to manage and implement the EMS.

2.2.2.4. An analysis of the organisation's regulatory and environmental obligations, including the potential risks to the environment from the activity.

2.2.2.5. The procedures required by this licence, including procedures for;

2.2.2.5.1. ensuring compliance with environmental legislation;

2.2.2.5.2. ensuring employee awareness of and involvement in complying with environmental legislation; and

2.2.2.5.3. checking performance and developing performance indicators by sectoral benchmarking on a regular basis including energy efficiency.

2.2.2.6. An inventory of water, energy and raw materials consumption as well as of waste gas streams, that incorporates the features specified in BAT 2.

2.2.2.7. A noise management plan in accordance with BAT 13 and Condition 6.14 of this licence.

2.2.2.8. An energy efficiency plan in accordance with BAT 6a.

2.2.2.9. Schedule of Environmental Objectives and Targets

The licensee shall **prepare, maintain and implement** a Schedule of Environmental Objectives and Targets. The schedule shall, as a minimum, provide for a review of all operations and processes, as referred to in the conditions of this licence, including an evaluation of practicable options for:

(i) energy and resource efficiency;

(ii) the reduction in water consumption;

(iii) the use of cleaner technology, cleaner production;

(iv) the reduction in dust emissions;

(v) odour and noise management;

(vi) the reduction and/or reconfiguration of the emission points to air as required in accordance with Condition 6.22;

(vii) the prevention, reduction and minimisation of waste including waste reduction targets;

(viii) the impacts from eventual decommissioning of the installation, and

(ix) a monitoring and measurement programme.

The Schedule shall include time frames for the achievement of set targets and shall address a five-year period as a minimum. The Schedule shall be reviewed annually.

2.2.2.10. Environmental Management Programme (EMP)

The licensee shall **prepare, maintain and implement** an EMP, including a time schedule, for achieving the Environmental Objectives and Targets prepared under Condition 2.2.2.9 above. The EMP shall include:

- designation of responsibility for targets;
- the means by which they may be achieved; and
- the time within which they may be achieved.

The EMP shall be reviewed annually.

A report on the programme, including the success in meeting agreed targets and an evaluation of non-conformities and associated corrective actions and the potential for further non-conformities to occur shall be prepared and submitted to the Agency as part of the AER. Such reports shall be retained on-site for a period of not less than seven years and shall be available for inspection by authorised persons of the Agency.

2.2.2.11. Documentation

- (i) The licensee shall **establish, maintain and implement** an environmental management documentation system.
- (ii) The licensee shall issue a copy of this licence to all relevant personnel whose duties relate to any condition of this licence.

2.2.2.12. Corrective and Preventative Action

- (1) The licensee shall **establish, maintain and implement** procedures to ensure that corrective and preventative action is taken should the specified requirements of this licence not be fulfilled. The responsibility and authority for persons initiating further investigation and corrective and preventative action in the event of a reported non-conformity with this licence shall be defined.
- (2) Where a breach of one or more of the conditions of this licence occurs, the licensee shall without delay take measures to restore compliance with the conditions of this licence in the shortest possible time and initiate any feasible preventative actions to prevent recurrence of the breach.
- (3) All corrective and preventative actions shall be documented.

2.2.2.13. Internal Audits

The licensee shall **establish, maintain and implement** a programme for independent internal audits **and periodic independent external audits** of the EMS. Such audits shall be carried out at least once every three years. The audit programme shall determine whether or not the EMS is being implemented and maintained properly, and in accordance with the requirements of this licence. Audit reports and records of the resultant corrective and preventative actions shall be maintained as part of the EMS in accordance with Condition 2.2.2.11.

2.2.2.14. Awareness, Training and Competence

The licensee shall **establish, maintain and implement** procedures for identifying training needs, and for providing appropriate training, for all personnel whose work can have a significant effect upon the environment to ensure awareness and competence in their work area. Appropriate records of training shall be maintained.

2.2.2.15. Public Awareness and Communications Programme

2.2.2.15.1. The licensee shall **establish, maintain and implement** a Public Awareness and Communications Programme to ensure that members of the public can obtain information at the installation, at all reasonable times, concerning the environmental performance of the installation.

2.2.2.15.2. The programme shall be agreed by the Agency and a report on the programme shall be prepared and submitted to the Agency annually.

2.2.2.16. Maintenance Programme

The licensee shall **establish, maintain and implement** a programme for maintenance of all plant and equipment based on the instructions issued by the manufacturer/supplier or installer of the equipment. Appropriate record keeping and diagnostic testing shall support this maintenance programme. The licensee shall clearly allocate responsibility for the planning, management and execution of all aspects of this programme to appropriate personnel (see Condition 2.1 above). The maintenance programme shall use appropriate techniques and measures to ensure the optimisation of energy efficiency in plant and equipment.

2.2.2.17. Efficient Process Control

The licensee shall **establish, maintain and implement** a programme to ensure there is adequate control of processes under all modes of operation. The programme shall identify the key indicator parameters for process control performance, as well as identifying methods for measuring and controlling these parameters. Abnormal process operating conditions shall be documented, and analysed to identify any necessary corrective action.

Reason: *To make provision for management of the activity on a planned basis having regard to the desirability of ongoing assessment, recording and reporting of matters affecting the environment.*

Condition 3. Infrastructure and Operation

3.1 The licensee shall ensure, at all times after the grant of this licence, that all infrastructure and all equipment required under this licence has been and is:

- (i) installed;
- (ii) commissioned;
- (iii) present on site; and
- (iv) maintained in full working order.

3.2 Where any condition or schedule of this licence specifies any later deadline for installation of any piece of infrastructure or equipment, Condition 3.1 shall apply as and from the deadline specified.

3.3 The licensee shall establish and maintain, for each component of the installation, all infrastructure referred to in this licence in advance of the commencement of the licensed activities in that component, or as required by the conditions of this licence. Infrastructure specified in the application that relates to the environmental performance of the installation and is not specified in this licence, shall be installed in accordance with the schedule submitted in the application.

3.4 The licensee shall have regard to the following when choosing and/or designing any new plant/infrastructure:

- (i) Energy efficiency, and

- (ii) The environmental impact of its construction/installation, maintenance, operation and eventual decommissioning.
- 3.5 Installation Notice Board
- (i) The licensee shall within one month of the date of grant of this licence, provide an Installation Notice Board on the installation so that it is legible to persons outside the main entrance to the installation. The minimum dimensions of the board shall be 1200mm by 750mm. The notice board shall be maintained thereafter.
 - (ii) The board shall clearly show:
 - (i) the name and telephone number of the installation;
 - (ii) the normal hours of operation;
 - (iii) the name of the licence holder;
 - (iv) an emergency out of hours contact telephone number;
 - (v) this licence reference number; and
 - (vi) where environmental information relating to the installation can be obtained.
- 3.6 The licensee shall install on all emission points such sampling points or equipment, including any data-logging or other electronic communication equipment, as may be required by the Agency. All such equipment shall be consistent with the safe operation of all sampling and monitoring systems.
- 3.7 In the case of composite sampling of aqueous emissions from the operation of the installation, a separate composite sample or homogeneous sub-sample (of sufficient volume as advised) shall be refrigerated immediately after collection and retained as required for EPA use.
- 3.8 The licensee shall clearly label and provide safe and permanent access to all on-site sampling and monitoring points and to off-site points as required by the Agency. The requirement with regard to off-site points is subject to the prior agreement of the landowner(s) concerned.
- 3.9 Tank, Container and Drum Storage Areas
- 3.9.1 All tank, container and drum storage areas shall be rendered impervious to the materials stored therein. Bunds shall be designed having regard to Agency guidelines 'Storage and Transfer of Materials for Scheduled Activities' (2004).
 - 3.9.2 All tank and drum storage areas shall, as a minimum, be bunded, either locally or remotely, to a volume not less than the greater of the following:
 - (i) 110% of the capacity of the largest tank or drum within the bunded area; or
 - (ii) 25% of the total volume of substance that could be stored within the bunded area.
 - 3.9.3 All drainage from bunded areas shall be treated as contaminated unless it can be demonstrated to be otherwise.
 - 3.9.4 All drainage from bunded areas shall be diverted for collection and safe disposal, unless it can be deemed uncontaminated and does not exceed the trigger levels set for storm water emissions under Condition 6.13.
 - 3.9.5 All inlets, outlets, vent pipes, valves and gauges must be within the bunded area.
 - 3.9.6 All tanks, containers and drums shall be labelled to clearly indicate their contents.
 - 3.9.7 All bunds shall be uniquely identified and labelled at the bund.
 - 3.9.8 The licensee shall apply a leak detection system to all storage tanks, container and drum storage areas that contain liquid material other than water.
- 3.10 The licensee shall have in storage an adequate supply of containment booms and/or suitable absorbent material to contain and absorb any spillage at the installation. Once used, the absorbent material shall be disposed of at an appropriate facility.
- 3.11 Water metering and records

- 3.11.1 The licensee shall maintain a water meter on all water supplies serving the installation, prior to utilisation.
- 3.11.2 Records of water usage shall be maintained on site and a summary records report shall be submitted annually as part of the AER.
- 3.11.3 Daily records of water abstraction from the on-site well shall be kept during times of peak usage and should usage exceed 25m³ in any 24-hour period, the abstraction shall be registered with the Agency as per the European Union (Water Policy) (Abstractions Registration) Regulations 2018 S.I. 261 of 2018).
- 3.12 Silt Traps and Oil Separators
- The licensee shall maintain silt traps and oil separators at the installation:
- (i) Silt traps to ensure that all storm water discharges, other than from roofs, from the installation pass through a silt trap in advance of discharge;
 - (ii) An oil separator on the storm water discharge from all yard areas **to the ICW**. The separator shall be a Class I by-pass separator.
 - (iii) An oil separator on the storm water discharge **from the refuelling area**. The separator shall be a Class I full retention separator.
- The separator shall be in accordance with I.S. EN-858-2: 2003 (separator systems for light liquids).
- 3.13 Fire-water Retention
- 3.13.1 The licensee shall carry out a risk assessment to determine the retention requirements for fire water run-off from the installation. The risk assessment, and any subsequent reports or programmes, shall be completed in accordance with any guidelines issued by the Agency with regard to firewater retention.
- 3.13.2 The licensee shall submit the Firewater Risk Assessment Report based on the assessment in Condition 3.12.1 to the Agency for approval within nine months of the date of grant of this licence.
- 3.13.3 The licensee shall implement the Firewater Risk Assessment Report as approved by the Agency under Condition 3.12.2, within the timeframes specified by the Agency.
- 3.14 All pump sumps, storage tanks or other treatment plant chambers from which spillage of environmentally significant materials might occur in such quantities as are likely to breach local or remote containment or separators, shall be fitted with high liquid level alarms (or oil detectors as appropriate) **within six months** from the date of grant of this licence.
- 3.15 The provision of a catchment system to collect any leaks from flanges and valves of all over-ground pipes used to transport material other than water shall be examined. This shall be incorporated into a Schedule of Environmental Objectives and Targets set out in Condition 2 of this licence for the reduction in diffuse emissions.
- 3.16 All wellheads at the installation shall be adequately protected to prevent contamination or physical damage.
- 3.17 The licensee shall, within three months of the date of grant of this licence, install and thereafter maintain in a prominent location on the site a wind sock, or other wind direction indicator, which shall be visible from the public roadway outside the site.
- 3.18 **Liquefied Petroleum Gas (LPG)** shall be used in the boilers **and dryer burners** on site. In the event of an interruption to the supply of LPG, an alternative fuel such as gas oil may be used with the prior approval of the Agency.
- 3.19 **The licensee shall ensure that all vehicle engines are switched off when parked on-site.**
- 3.20 The licensee shall provide and maintain a Wastewater Treatment plant at the installation for the treatment of sanitary effluent arising on-site. Any waste water treatment system and percolation area shall satisfy the criteria set out in the *Code of Practice Wastewater Treatment Manual – Treatment Systems for small Communities, Leisure Centres and Hotels*, published by the Environmental Protection Agency.

3.21 Integrated Constructed Wetland (ICW) System

- 3.21.1 The licensee shall maintain an ICW at the installation for the capture of all stormwater arising on-site.
- 3.21.2 The licensee shall, within three months of date of grant of this licence, establish, maintain and implement a programme for the operation, inspection and maintenance of the ICW in accordance with industry best practice and having regard to any relevant guidance. The programme shall include at least the following:
- (i) flow patterns;
 - (ii) water depth and turbidity; and
 - (iii) sediment depth, vegetation composition and invertebrate monitoring.
- 3.21.3 The programme, established under 3.21.2, shall be reviewed periodically and updated as required by, or as approved by, the Agency.
- 3.21.4 The licensee shall, within 24 months of the date of grant of this licence, establish trigger values for removal of sediment from the wetland ponds based on monitoring required in *Schedule C.2.2: Control of Storm Water Emissions*, of this licence.
- 3.21.5 The licensee shall maintain a shut-off valve and flow measurement device on storm water discharges from the ICW at discharge point SW1A.

Reason: *To provide for appropriate operation of the installation to ensure protection of the environment.*

Condition 4. Interpretation

- 4.1 Emission limit values for emissions to atmosphere in this licence shall be interpreted in the following way:
- 4.1.1 Continuous Monitoring
- (i) No 24 hour mean value shall exceed the emission limit value.
 - (ii) 97% of all 30-minute mean values taken continuously over an annual period shall not exceed 1.2 times the emission limit value.
 - (iii) No 30-minute mean value shall exceed twice the emission limit value.
- 4.1.2 Non-Continuous Monitoring
- (i) For any parameter where, due to sampling/analytical limitations, a 30-minute sample is inappropriate, a suitable sampling period should be employed and the value obtained therein shall not exceed the emission limit value.
 - (ii) For flow, no hourly or daily mean value, calculated on the basis of appropriate spot readings, shall exceed the relevant limit value.
 - (iii) For all other parameters, no 30-minute mean value shall exceed the emission limit value.
 - (iv) Mass flow thresholds refer to a rate of discharge expressed in units of kg/h, above which the concentration emission limit value applies. Mass flow threshold rates shall be determined on the basis of a single 30-minute measurement (i.e. the concentration determined as a 30-minute average shall be multiplied by an appropriate measurement of flow and the result shall be expressed in units of kg/h).

- (v) Mass flow emissions shall be calculated on the basis of the concentration, determined as an average over the specified period, multiplied by an appropriate measurement of flow. No value, so determined, shall exceed the mass flow limit value.
- 4.2 The concentration and volume flow limits for emissions to atmosphere specified in this licence shall be achieved without the introduction of dilution air and shall be based on gas volumes under standard conditions of:
- 4.2.1 From non-combustion sources:
Temperature 273K, Pressure 101.3 kPa (no correction for oxygen or water content).
- 4.2.2 From combustion sources:
Temperature 273K, Pressure 101.3 kPa, dry gas; 3% oxygen for liquid and gas fuels.
- 4.3 Emission limit values for emissions to sewer/waters in this licence shall be achieved without the introduction of dilution, and shall be interpreted in the following way:
- 4.3.1 Continuous Monitoring
- (i) No flow value shall exceed the specific limit.
- (ii) No pH value shall deviate from the specified range.
- (iii) No temperature value shall exceed the limit value.
- 4.3.2 Composite Sampling
- (i) No pH value shall deviate from the specified range.
- (ii) For parameters other than pH and flow, eight out of ten consecutive composite results, based on flow proportional composite sampling, shall not exceed the emission limit value. No individual results similarly calculated shall exceed 1.2 times the emission limit value.
- 4.3.3 Discrete Sampling
For parameters other than pH and temperature, no grab sample value shall exceed 1.2 times the emission limit value.
- 4.4 Where the ability to measure a parameter is affected by mixing before emission, then, with agreement from the Agency, the parameter may be assessed before mixing takes place.
- 4.5 Noise
Noise from the installation shall not give rise to sound pressure levels measured at **noise-sensitive locations (NSLs)** which exceed the limit value(s).
- 4.6 Dust and Particulate Matter
Dust and particulate matters from the activity shall not give rise to deposition levels which exceed the limit value(s).

Reason: *To clarify the interpretation of limit values fixed under this licence.*

Condition 5. Emissions

- 5.1 Emissions may be made from the specified emission points set out in *Schedule B: Emission Limits*, of this licence subject to compliance with the Emission Limit Values specified in that Schedule.
- 5.1.1 Uncontaminated storm water may be discharged to surface water.
- 5.1.2 Uncontaminated storm water may be emitted to groundwater or to soil.

- 5.1.3 Minor, diffuse and potential emissions may be emitted to air as specified in the application, or as approved by the Agency under Condition 1 of this licence.
- 5.2 Notwithstanding the requirements of Condition 5.1, there shall be no other emissions from the installation.
- 5.3 No emissions, including odours and dust, from the activities carried on at the site shall result in an impairment of, or an interference with amenities or the environment beyond the installation boundary or any other legitimate uses of the environment beyond the installation boundary.
- 5.4 The licensee shall ensure that all or any of the following:
- Vermin
 - Birds
 - Flies
 - Mud
 - Litter

associated with the activity do not result in an impairment of, or an interference with, amenities or the environment at the installation or beyond the installation boundary or any other legitimate uses of the environment beyond the installation boundary. Any method used by the licensee to control or prevent any such impairment/interference shall not cause environmental pollution.

Reason: To provide for the protection of the environment by way of control and limitation of emissions

Condition 6. Control and Monitoring

- 6.1 Test Programme
- 6.1.1 The licensee shall prepare a test programme for abatement equipment installed to abate emissions.
- 6.1.2 The programme shall be completed within three months of the commencement of operation of the abatement equipment.
- 6.1.3 The criteria for the operation of the abatement equipment as determined by the test programme, shall be incorporated into the standard operating procedures.
- 6.1.4 The test programme shall as a minimum:
- (i) establish all criteria for operation, control and management of the abatement equipment to ensure compliance with the emission limit values specified in this licence;
 - (ii) assess the performance of any monitors on the abatement system and establish a maintenance and calibration programme for each monitor, and
 - (iii) be prepared in accordance with the guidance published by the Agency, '*Air Emissions Monitoring Guidance Note (AG2)*', as may be amended or replaced.
- 6.1.5 A report on the test programme shall be submitted to the Agency within one month of completion.
- 6.2 The licensee shall carry out such sampling, analyses, measurements, examinations, maintenance, calibrations and control techniques as set out below and as in accordance with *Schedule C: Control and Monitoring*, of this licence.
- 6.2.1 Sampling and analysis shall be undertaken by competent staff in accordance with documented operating procedures. Unless otherwise approved by the Agency, sampling and analysis of emissions to atmosphere shall be carried out by ISO 17025 accredited persons/organisations, with accreditation for the relevant scope of sampling and analysis, and in accordance with the Agency's air monitoring policy.

- 6.2.2 Such procedures shall be assessed for their suitability for the test matrix and performance characteristics shall be determined.
- 6.2.3 Such procedures shall be subject to a programme of Analytical Quality Control using appropriate control standards with evaluation of test responses.
- 6.2.4 Where any analysis is sub-contracted it shall be outsourced to a competent laboratory.
- 6.3 The licensee shall ensure that:
 - (i) sampling and analysis for all parameters listed in the schedules to this licence; and
 - (ii) any reference measurements for the calibration of automated measurement systems shall be carried out in accordance with CEN-standards. If CEN standards are not available, ISO, national or international standards, which will ensure the provision of data of an equivalent scientific quality, shall apply.
- 6.4 All automatic monitors and samplers shall be functioning at all times (except during maintenance and calibration) when the activity is being carried on unless alternative sampling or monitoring has been approved in writing by the Agency for a limited period. In the event of the malfunction of any continuous monitor, the licensee shall contact the Agency as soon as practicable, and alternative sampling and monitoring facilities shall be put in place. The use of alternative equipment, other than in emergency situations, shall be as approved by the Agency.
- 6.5 Monitoring and analysis equipment shall be installed, operated and maintained as necessary so that all monitoring results accurately reflect any emission, discharge or parameter specified in this licence.
- 6.6 The licensee shall ensure that groundwater monitoring well sampling equipment is available or installed on-site at the installation and is fit for purpose at all times. The sampling equipment shall be to Agency specifications.
- 6.7 All treatment/abatement and emission control equipment shall be calibrated and maintained in accordance with the instructions issued by the manufacturer/supplier or installer.
- 6.8 The frequency, methods and scope of monitoring, sampling and analyses, as set out in this licence, may be amended as required or approved by the Agency following evaluation of test results.
- 6.9 The licensee shall prepare and implement a programme, to the satisfaction of the Agency, for the identification and reduction of diffuse emissions using an appropriate combination of best available techniques. This programme shall be included in the Environmental Management Programme.
- 6.10 The integrity and water tightness of all tanks, bunding structures, containers and underground pipes and their resistance to penetration by water or other materials carried or stored therein shall be tested and demonstrated by the licensee within **six** months of the date of grant of this licence.
 - 6.10.1 In the case of new bunding structures, tanks, underground pipelines and containers installed on site, the testing for integrity and water tightness shall be undertaken in advance of utilisation;
 - 6.10.2 Testing shall be carried out by a suitably qualified and experienced person;
 - 6.10.3 Testing shall be carried out in accordance with any guidance published by the Agency;
 - 6.10.4 Testing shall be carried out at least once every three years thereafter and reported to the Agency on each occasion;
 - 6.10.5 Any repairs required to ensure the integrity and water tightness of tanks, bunding structures, containers and underground pipes shall be carried out as soon as practicable; and
 - 6.10.6 A written record of all integrity tests and any maintenance or remedial work arising from them shall be maintained by the licensee.
- 6.11 The storm water drainage system (i.e., gullies, manholes, any visible drainage conduits and such other aspects as may be required by the Agency), bunds, silt traps and oil separators shall be

- inspected weekly, desludged as necessary, and properly maintained at all times. All sludge and drainage from these operations shall be collected for safe disposal. The licensee shall maintain a drainage map on site. The drainage map shall be reviewed annually and updated as necessary.
- 6.12 An inspection system for the detection of leaks on all flanges and valves on over-ground pipes used to transport materials other than water shall be developed within six months of the date of grant of this licence and maintained thereafter.
- 6.13 Storm Water
- 6.13.1 A visual examination of the storm water discharges shall be carried out daily **at SW1A and SW1B**. A log of such inspections, shall be maintained.
- 6.13.2 Trigger Values
- 6.13.2.1 The licensee shall, within 12 months of the commencement of the activity, establish suitable trigger levels for pH, conductivity, ammonia, ortho-phosphate (Ortho-P), biochemical oxygen demand (BOD), chemical oxygen demand (COD) and suspended solids in storm water discharges **at SW1A and SW1B**, to the satisfaction of the Agency. The trigger values shall be established in accordance with the methods outlined in the Environmental Protection Agency's "*Guidance on the setting of trigger values for storm water discharges to off-site surface waters at EPA IPPC and Waste licensed facilities*".
- 6.13.2.2 The trigger values may be revised, to the satisfaction of the Agency, following evaluation of appropriate storm water monitoring data in accordance with the methods outlined in the Environmental Protection Agency's "*Guidance on the setting of trigger values for storm water discharges to off-site surface waters at EPA IPPC and Waste licensed facilities*".
- 6.13.2.3 The licensee shall establish, maintain and implement a response programme to address any exceedance of the trigger values such that storm waters exceeding these levels will be diverted for retention and suitable disposal.
- 6.14 Noise
- 6.14.1 The licensee shall carry out a noise survey of the site operations annually. The survey programme shall be undertaken in accordance with the methodology specified in the '*Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)*' as published by the Agency.
- 6.14.2 The licensee shall use one or a combination of the techniques listed in BAT 14 in order to prevent or, where that is not practicable, to reduce noise emissions.**
- 6.14.3 Noise Management Plan
- 6.14.3.1 The licensee shall prepare, maintain and implement, to the satisfaction of the Agency, a Noise Management Plan.
- 6.14.3.2 The plan shall be submitted within six months of the date of grant of this licence.
- 6.14.3.3 The plan shall outline noise reduction and abatement measures.
- 6.14.3.4 The plan to reduce noise emissions should include the following mitigation measure(s): abatement and enclosure of operations, processes and equipment giving rise to exceedances of noise limit values measured at noise sensitive locations.
- 6.14.3.5 The plan shall be prepared in accordance with the Agency's '*Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)*'.
- 6.14.3.6 The plan shall be implemented within **24** months of the date of grant of this licence.
- 6.14.3.7 The plan shall be reviewed annually **thereafter**.

- 6.15 Odour
- 6.15.1 The licensee shall carry out an odour survey of the site operations weekly.
- 6.15.2 The survey programme shall be undertaken in accordance with the methodology specified in the 'Air Guidance Note 5 (AG5) Odour Impact Assessment Guidance for EPA Licensed Sites' as published by the Agency.
- 6.16 Pollutant Release and Transfer Register (PRTR)
- The licensee shall submit a PRTR data report for the site. The pollutants and/or wastes to be included in the PRTR shall be determined by reference to EC Regulations No. 166/2006 concerning the establishment of a European Pollutant Release and Transfer Register. The PRTR shall be prepared in accordance with any relevant Agency guidance and shall be submitted electronically in the format specified by the Agency.
- 6.17 The licensee shall, within six months of the date of grant of this licence, develop and establish a Data Management System for collation, archiving, assessing and graphically presenting the monitoring data generated as a result of this licence.
- 6.18 Ground Water
- The licensee shall, within six months of the date of grant of this licence, install additional groundwater monitoring wells at the facility that are screened to a depth approved by the Agency. The locations of the wells, which shall be approved by the Agency, shall be based on groundwater flow gradients as follows:**
- a) **At least one well that will provide a representative sample of groundwater upgradient of the ICW boundary,**
- b) **At least two wells that will provide a representative sample of groundwater downgradient of the ICW boundary, and**
- c) **At least one well that will provide a representative sample of groundwater downgradient of the of the on-site sanitary waste water treatment plant.**
- 6.19 Hydrogeological Risk Assessment
- 6.19.1 The licensee shall assess groundwater monitoring data annually and determine compliance under this licence with the *European Communities Environmental Objectives (Groundwater) Regulations 2010*, S.I. No. 9 of 2010, as amended.
- 6.19.2 A report on this assessment shall be included in the AER.
- 6.19.3 The licensee shall in the event of a failure to demonstrate compliance with the *European Communities Environmental Objectives (Groundwater) Regulations 2010* as amended, or if instructed by the Agency, arrange for the completion, by an appropriately qualified consultant/professional, of a hydrogeological risk assessment to:
- (i) Identify the risk of groundwater contamination arising from the licensed and past activities;
- (ii) Assess the impact of extant groundwater contamination;
- (iii) Propose preventative and, as appropriate, remedial actions to be undertaken;
- (iv) Propose groundwater compliance values to be maintained at compliance points; and
- (v) Address other matters that may be identified by the Agency.
- 6.19.4 Any hydrogeological risk assessment prepared under Condition 6.19.3 of this licence shall be submitted to the Agency.
- 6.19.5 The licensee shall implement the following:
- (i) Any proposals or recommendations arising from the hydrogeological risk assessment;

- (ii) The installation of new groundwater monitoring boreholes where necessary to characterise groundwater quality; and
 - (iii) Any other matters that may be directed by the Agency.
- 6.19.6 The licensee shall ensure that groundwater monitoring well sampling equipment is available or installed on-site at the facility and is fit for purpose at all times. The sampling equipment shall be to the Agency specifications.
- 6.20 Groundwater and Soil Monitoring
- The licensee shall carry out monitoring for relevant hazardous substances in soil and groundwater at the site of the installation. The substances for monitoring shall be identified by the licensee by undertaking a risk-based assessment. The risk assessment, sampling and monitoring shall be carried out in accordance with any guidance published by the Agency. The licensee shall have regard to the ‘*Classification of Hazardous and Non-Hazardous Substances in Groundwater*’ as published by the Agency
- 6.20.1 Monitoring shall be carried out in accordance with *Schedule C.6 Groundwater Monitoring* of this licence.
- 6.20.2 Soil monitoring shall be carried out at least once every ten years at locations to be approved by the Agency.
- 6.21 **Dryer and Boiler Operations**
- 6.21.1 **Each grain and seed dryer on-site shall only operate during the harvest period (July to October).**
- 6.21.2 **The main duty boiler associated with emission point A1-1 and the back-up boiler associated with emission point A1-2 shall not operate concurrently for more than 312 hours per annum.**
- 6.21.3 **The licensee shall maintain a record of the operation of the dryers and the back-up boiler (associated with emission point A1-2). The licensee shall verify the duration of operation of each to the satisfaction of the Agency.**
- 6.21.4 **The record shall include duration and times of operation, and details of monitoring carried out on control parameters.**
- 6.22 **The licensee shall submit a report, within six months of date of grant of this licence, on the feasibility of reducing and/or reconfiguring the number of emission points to air for total particulates listed in *Schedule B.1 Emissions to Air*. The recommendations of the report shall be incorporated into the Schedule of Environmental Objectives and Targets under Condition 2 above.**

Reason: *To provide for the protection of the environment by way of treatment and monitoring of emissions.*

Condition 7. Resource Use and Energy Efficiency

- 7.1 The licensee shall carry out an audit of the energy efficiency of the site within one year of the date of grant of this licence. The audit shall be carried out in accordance with the guidance published by the Agency, “Guidance Note on Energy Efficiency Auditing”. The energy efficiency audit shall be repeated at intervals as required by the Agency.
- 7.2 The audit shall identify all practicable opportunities for energy use reduction and efficiency and the recommendations of the audit will be incorporated into the Schedule of Environmental Objectives and Targets under Condition 2 above. **The licensee shall use BAT 6a and an appropriate combination of the techniques listed in BAT 6b to increase energy efficiency.**
- 7.3 The licensee shall identify opportunities for reduction in the quantity of water used on site including recycling and reuse initiatives, wherever possible. Reductions in water usage shall be incorporated into the Schedule of Environmental Objectives and Targets under Condition 2

above. **The licensee shall use BAT 7a and one or a combination of the techniques listed in BAT 7b to k to reduce water consumption and the volume of wastewater discharge.**

- 7.4 The licensee shall undertake an assessment of the efficiency of use of raw materials in all processes, having particular regard to the reduction in waste generated. The assessment should take account of best international practice for this type of activity. Where improvements are identified, these shall be incorporated into the Schedule of Environmental Objectives and Targets under Condition 2 above. **The licensee shall use one or a combination of the techniques listed in BAT 10 to increase resource efficiency.**

Reason: *To provide for the efficient use of resources and energy in all site operations.*

Condition 8. Materials Handling

- 8.1 The licensee shall ensure that waste generated in the carrying on of the activity shall be prepared for re-use, recycling or recovery or, where that is not technically or economically possible, disposed of in a manner which will prevent or minimise any impact on the environment.
- 8.2 Waste sent off-site for recovery or disposal
- 8.2.1 Waste sent off-site for recovery or disposal shall be transported only by an authorised waste contractor.
- 8.2.2 Waste shall be transported from the site of the activity to the site of recovery/disposal only in a manner that will not adversely affect the environment and in accordance with the appropriate National and European legislation and protocols.
- 8.2.3 Waste sent off-site for recovery or disposal shall be transferred only to an appropriate facility.
- 8.3 The licensee shall ensure that, in advance of transfer to another person, waste shall be classified, packaged and labelled in accordance with National, European and any other standards which are in force in relation to such labelling.
- 8.4 The loading and unloading of materials shall be carried out in designated areas protected against spillage and leachate run-off.
- 8.5 Waste and materials shall be stored in designated areas, protected as may be appropriate against spillage and leachate run-off. The waste and materials shall be clearly labelled and appropriately segregated.
- 8.6 Waste for disposal/recovery off-site shall be analysed in accordance with *Schedule C: Control and Monitoring*, of this licence.
- 8.7 Unless approved in writing, in advance, by the Agency the licensee is prohibited from mixing a hazardous waste of one category with a hazardous waste of another category or with any other non-hazardous waste.
- 8.8 The licensee shall neither import waste into the State nor export waste out of the State except in accordance with the relevant provisions of Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14th June 2006 on shipments of waste and associated national regulations.
- 8.9 **The licensee shall use one or a combination of the techniques listed in BAT 8 in order to prevent or reduce the use of harmful substances.**

Reason: *To provide for the appropriate handling of material and the protection of the environment.*

Condition 9. Accident Prevention and Emergency Response

- 9.1 The licensee shall, within six months of date of grant of this licence, ensure that a documented Accident Prevention Procedure is in place that addresses the hazards on-site, particularly in relation to the prevention of accidents with a possible impact on the environment. This procedure shall be reviewed annually and updated as necessary.
- 9.2 The licensee shall, within six months of date of grant of this licence, ensure that a documented Emergency Response Procedure is in place, that addresses any emergency situation which may originate on-site. This procedure shall include provision for minimising the effects of any emergency on the environment. This procedure shall be reviewed annually and updated as necessary.
- 9.3 Incidents
- 9.3.1 In the event of an incident the licensee shall immediately:
- (i) carry out an investigation to identify the nature, source and cause of the incident and any emission arising therefrom;
 - (ii) isolate the source of any such emission;
 - (iii) evaluate the environmental pollution, if any, caused by the incident;
 - (iv) identify and execute measures to minimise the emissions/malfunction and the effects thereof;
 - (v) identify the date, time and place of the incident; and
 - (vi) notify the Agency as required by Condition 11.3 of this licence.
- 9.3.2 Where an incident or accident that significantly affects the environment occurs, the licensee shall, without delay take measures to limit the environmental consequences of the incident or accident and to prevent further incident or accident.

Reason: *To provide for the protection of the environment.*

Condition 10. Closure, Restoration and Aftercare Management

- 10.1 Following termination, or planned cessation for a period greater than six months, of use or involvement of all or part of the site in the licensed activity, the licensee shall, to the satisfaction of the Agency, decommission, render safe or remove for disposal/recovery any soil, subsoil, buildings, plant or equipment, or any waste, materials or substances or other matter contained therein or thereon, that may result in environmental pollution. A final validation report to include a certificate of completion to demonstrate there is no continuing risk to the environment shall be submitted to the Agency within three months of termination or planned cessation of the activity.

Reason: *To make provision for the proper closure of the activity ensuring protection of the environment.*

Condition 11. Notification, Records and Reports

- 11.1 The licensee shall submit the reports, proposals and submissions required by this licence by the deadlines specified. The licensee shall not be in compliance with the requirements of this condition unless and until it has submitted every report, proposal and submission, the deadline for which has passed.

- 11.2 The licensee shall carry out every action required by the Agency, and arising out of such reports, proposals or submissions, by such deadline as the Agency may specify. The licensee shall not be in compliance with the requirements of this condition unless and until it has carried out every such action.
- 11.3 The licensee shall notify the Agency, in a format as may be specified by the Agency, as soon as practicable after the occurrence of any of the following:
- (i) an incident or accident as defined by the glossary;
 - (ii) any breach of one or more of the conditions attached to this licence.
- The licensee shall include as part of the notification, date and time of the incident, summary details of the occurrence, and where available, the steps taken to minimise any emissions. All details required to be communicated must be in accordance with any guidance provided by the Agency.
- 11.4 In the event of any incident which relates to discharges to sewer having taken place, the licensee shall notify Irish Water and the Local Authority in a manner prescribed by Irish Water, as soon as practicable after such an incident.
- 11.5 The following shall be notified, as soon as practicable after the occurrence of any incident which relates to a discharge to water:
- (i) Inland Fisheries Ireland in the case of discharges to receiving waters.
- 11.6 The licensee shall make a record of any notification made under Condition 11.3. This record shall include details of the nature, extent, and impact of, and circumstances giving rise to, the incident or accident. The record shall include all corrective actions taken to manage the incident or accident, minimise wastes generated and the effect on the environment, and avoid recurrence. In the case of a breach of a condition, the record shall include measures to restore compliance.
- 11.7 The licensee shall record all complaints of an environmental nature related to the operation of the activity. Each such record shall give details of the date and time of the complaint, the name of the complainant (if provided), and give details of the nature of the complaint. A record shall also be kept of the response made in the case of each complaint.
- 11.8 The licensee shall record all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence and all other such monitoring which relates to the environmental performance of the installation.
- 11.9 The licensee shall as a minimum ensure that the following documents are accessible at the site:
- (i) the licences relating to the installation;
 - (ii) the current EMS for the installation including all associated procedures, reports, records and other documents;
 - (iii) the previous year's AER for the installation;
 - (iv) records of all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence and all other such monitoring which relates to the environmental performance of the installation;
 - (v) relevant correspondence with the Agency;
 - (vi) up-to-date site drawings/plans showing the location of key process and environmental infrastructure, including monitoring locations and emission points;
 - (vii) up-to-date Standard Operational Procedures for all processes, plant and equipment necessary to give effect to this licence or otherwise to ensure that standard operation of such processes, plant or equipment does not result in unauthorised emissions to the environment; and
 - (viii) any elements of the licence application or EIA documentation referenced in this licence.
- This documentation shall be available to the Agency for inspection at all reasonable times.
- 11.10 The licensee shall submit to the Agency annually, or as otherwise approved by the Agency,

- 11.10.1 An AER covering the previous calendar year, which shall be;
- (i) to the satisfaction of the Agency and shall include as a minimum the information specified in *Schedule D: Annual Environmental Report*, of this licence,
 - (ii) prepared in accordance with any relevant guidelines issued by the Agency, and
 - (iii) submitted by the 31st March of each year,
- 11.10.2 The results of all emission monitoring carried out in accordance with the requirements of this licence; including an assessment and interpretation of the results.
- 11.11 A full record, which shall be open to inspection by authorised persons of the Agency at all times, shall be kept by the licensee on matters relating to the waste management operations and practices at this site. This record shall be as a minimum contain details of the following:
- (i) the tonnages and LoW Code for the waste materials sent off-site for disposal/recovery;
 - (ii) the names of the agent and carrier of the waste, and their waste collection permit details, if required (to include issuing authority and vehicle registration number);
 - (iii) details of the ultimate disposal/recovery destination facility for the waste and its appropriateness to accept the consigned waste stream, to include its permit/licence details and issuing authority, if required;
 - (iv) written confirmation of the acceptance and disposal/recovery of any hazardous waste consignments sent off-site;
 - (v) details of all waste consigned abroad for Recovery and classified as ‘Green’ in accordance with the EU Shipment of Waste Regulations (Council Regulation EEC No. 1013/2006, as may be amended). The rationale for the classification must form part of the record;
 - (vi) details of any rejected consignments;
 - (vii) details of any approved waste mixing;
 - (viii) the results of any waste analyses required under *Schedule C: Control and Monitoring*, of this licence;
 - (ix) the tonnage and LoW Code for the waste materials recovered/disposed on-site; and
 - (x) any other records as may be specified by the Agency.
- 11.12 The licensee shall submit report(s) electronically as required by the conditions of this licence to the Agency.
- 11.13 All reports shall be certified accurate and representative by the installation manager or a nominated, suitably qualified and experienced deputy.

Reason: *To provide for the collection and reporting of adequate information on the activity.*

Condition 12. Financial Charges and Provisions

12.1 Agency Charges

- 12.1.1 The licensee shall pay to the Agency an annual contribution of **€12,112**, or such sum as the Agency from time to time determines, having regard to variations in the extent of reporting, auditing, inspection, sampling and analysis or other functions carried out by the Agency, towards the cost of monitoring the activity as the Agency considers necessary for the performance of its functions under the Environmental Protection Agency Act 1992 as amended. The first payment shall be a pro-rata amount for the period from the date of grant of this licence to the 31st day of December, and shall be paid to the Agency within one month from the date of grant of this licence. In subsequent years the licensee shall pay to the Agency such revised annual contribution as the Agency shall from time to time consider necessary to enable performance by the Agency of its relevant functions under the Environmental Protection Agency Act 1992

as amended, and all such payments shall be made within one month of the date upon which demanded by the Agency.

12.1.2 In the event that the frequency or extent of monitoring or other functions carried out by the Agency needs to be increased, the licensee shall contribute such sums as determined by the Agency to defray its costs in regard to items not covered by the said annual contribution.

12.2 Environmental Liabilities

12.2.1 The Agency may amend this licence in accordance with Section 96 of the Environmental Protection Agency Act 1992 as amended to require, or not require as the case may be, the putting in place of a financial provision to address liabilities for CRAMP and/or Environmental Liabilities Risk Assessment.

Reason: To provide for adequate financing for monitoring and financial provisions for measures to protect the environment.

SCHEDULE A: Limitations

A.1 Limitations on the installation/facility

There are no limitations on the installation specified in the Schedule.

SCHEDULE B: Emission Limits

B.1 Emissions to Air

Emission Point Reference No:	A1-1 (duty boiler) and A1-2 (back-up boiler) ^{Note 1}
Location:	A1-1 – (268010E 154241N) A1-2 – (268009E 154242N)
Volume to be emitted:	Maximum in any one day: A1-1 – 120,000 m ³ A1-2 – 72,000 m ³
	Maximum rate per hour: A1-1 – 5,000m ³ A1-2 – 3,000m ³
Minimum discharge height:	18m above ground

Parameter	Emission Limit Value
Oxides of sulphur	35 mg/m ³
Nitrogen oxides (as NO ₂)	200 mg/m ³

Note 1: Back-up Boiler A1-2 shall operate in accordance with Condition 6.21 of this licence.

Emission point Reference No.	Source	Grid Ref	Max. Vol. emitted per hour (m ³ /hr)	Min. discharge height above ground (m)	Total Particulates Emission Limit Value (mg/Nm ³)	Total Particulates Mass Emission Limit (kg/hr)
Animal Feed Mill Air Emissions						
A2-1	Cuber 1	268040E 154205N	26,000	21	10	0.260
A2-2	Cuber 2	268040E 154203N	24,000	21	10	0.240
A2-3	Cuber 3	268035E 154164N	28,000	21	10	0.280
A2-4	Cuber 4	268041E 154208N	28,000	19	10	0.280
A2-6	Flaker 1	268001E 154208N	8,000	29	-	0.080
A2-7	Flaker 1	268000E 154208N	10,000	29	-	0.10
A2-8	Flaker 2	268006E 154206N	12,000	23.5	-	0.06
A2-9	Flaker 2	267998E 154206N	3,000	30	-	0.03
A2-10	Flaker	268005E 154207N	30,000	20	-	0.15
A2-11	Flaker dryer	268010E 154209N	10,000	32	-	0.05

A2-12	Cyclone GVRSA and GVRSB	268007E 154224N	26,000	25	-	0.26
A2-13	Flaker Cleaner	268002E 154226N	11,000	23	-	0.11
A2-15	Soya Grinder	267993E 154239N	5,000	3	10	0.05
A2-16	Soya Extruder	268003E 154221N	8,000	24	-	0.04
A2-17	Soya Cyclone – Bin Filling	267985E 154209N	3,000	30.5	-	0.03
A2-18	Grinder 1	268008E 154203N	7,000	3	5	0.035
A2-19	Grinder 3	268007E 154205N	6,500	3	5	0.033
A2-20	Grinder 4	268006E 154203N	8,000	3	5	0.04
A2-21	Main Grain intake –	268025E 154164N	6,500	15.9	-	0.033
A2-22	Extruder Vent	268002E 154209N	14,000	13.5	-	0.07
A2-23	Extruder Dryer/Cooler Vent	268002E 154238N	28,000	23	-	0.140
A2-26	Flaker Cleaner	268009E 154204N	6,000	23	-	0.03
Grain and Seed Dryers Air Emissions						
A2-30A	Dryer 2	267972E 154247N	59,000	8	-	0.295
A2-30B	Dryer 2	267972E 154246N	59,000	8	-	0.295
A2-31	Dryer 2 – pre- cleaner	268019E 154252N	2,000	9	-	0.02
A2-32	Dryer 5 – pre- cleaner	268028E 154447N	10,000	13	-	0.10
A2-33	Dryer 5	268042E 154460N	42,000	21.5	-	0.210
A2-34	Dryer 5	268040E 154461N	39,000	21.5	-	0.195
A2-35	Dryer 5	268038E 154459N	32,000	21.5	-	0.160
A2-36	Dryer 5 – Cyclone	268038E 154462N	39,000	21.5	-	0.195
A2-37	Dryer 5	268037E 154463N	39,000	21.5	-	0.195
A2-38	Dryer 4A2	268022E 154417N	53,000	11	-	0.265
A2-39	Dryer 4A1	268030E 154418N	83,000	11	-	0.415
A2-40	Dryer 4A/B – pre - cleaner	268005E 154443N	10,000	10.5	-	0.10
A2-41	Dryer 4B	268013E 154424E	59,000	19.5	-	0.295
A2-42	Dryer 4B	268016E 154422N	78,000	19.5	-	0.390
A2-45A	Replacement Dryer 6	268045E 154531N	136,000	24.5	-	1.36
A2-45B	Replacement Dryer 6	268047E 154535N	136,000	24.5	-	1.36
A2-46A	Replacement Dryer 6	268049E 154539N	136,000	24.5	-	1.36
A2-46B	Replacement Dryer 6	268051E 154543N	136,000	24.5	-	1.36
A2-46C	Replacement Dryer 6	268042E 154549N	20,000	20	-	0.20

Seed Plant Air Emissions						
A2-48	Seed Plant	268022E 154392N	20,000	12	-	0.20
A2-49	Seed Plant	268019E 154292N	10,000	12	-	0.10

B.2 Emissions to Water

There shall be no emissions to water of environmental significance.

B.3 Emissions to Sewer

There shall be no process effluent emissions to sewer.

B.4 Noise Emissions

Daytime dB $L_{Ar,T}$ (30 minutes)	Evening time dB $L_{Ar,T}$ (30 minutes)	Night-time dB $L_{Aeq,T}$ (30 minutes) ^{Note 1}
55	50	45

Note 1: During night time hours, there shall be no clearly audible tonal component or impulsive component in the noise emission from the activity at any noise-sensitive location.

B.5 Dust Deposition Limits

Parameter	Limit Value ^{Note 1}
Total dust deposition	350 mg/m ² /day

Note 1: 30-day composite sample with the results expressed as mg/m²/day.

B.6 Stormwater Discharges

Parameter	Limit Value
Flow	0.003m ³ /second

SCHEDULE C: Control and Monitoring

C.1.1. Control of Emissions to Air

Emission Point Reference No: A1-1 and A1-2
Description of Treatment: Combustion emissions

Control Parameter	Monitoring	Key Equipment ^{Note 1}
Boiler Efficiency	Flue Gas Analysis	Flue Gas Analyser

Note 1: The licensee shall maintain appropriate access to standby and/or spares to ensure the operation of the abatement system.



Emission Point Reference No: A2-1 to A2-4, A2-6 to A2-12, A2-15 to A2-17, A2-22, A2-26, A2-31 to A2-37, A2-40, A2-48, A2-49.
Description of Treatment: Cyclones

Control Parameter	Monitoring	Key Equipment ^{Note 1}
Air Flow	Flow meter/pitot tube SCADA alarms/alerts Visual inspections	Fan Filter SCADA system

Note 1: The licensee shall maintain appropriate access to standby and/or spares to ensure the operation of the abatement system.



Emission Point Reference No: A2-38, A2-39, A2-41 and A2-42
Description of Treatment: Cyclo-dust Separators.

Control Parameter	Monitoring	Key Equipment ^{Note 1}
Air Flow	Flow meter/pitot tube Visual inspections	Fan Filter

Note 1: The licensee shall maintain appropriate access to standby and/or spares to ensure the operation of the abatement system.



Emission Point Reference No: A2-6 to A2-9, A-18 to A2-21, A2-46C
Description of Treatment: Fabric Filters

Control Parameter	Monitoring	Key Equipment ^{Note 3}
Bag Filter Integrity	Differential pressure SCADA alarms/alerts ^{Note 1} Visual inspections ^{Note 2}	Differential pressure gauge SCADA systems

Note 1: SCADA shall not apply to emission point A2-46C associated with grain dryer number six.

Note 2: The licensee shall visually inspect filter integrity at least every quarter.

Note 3: The licensee shall maintain appropriate access to standby and/or spares to ensure the operation of the abatement system.



C.1.2. Monitoring of Emissions to Air

Emission Point Reference No: A1-1 and A1-2 (Steam Boilers)

Parameter	Monitoring Frequency ^{Note 1}	Analysis Method/Technique
Flow	Annually	Standard Method
NO _x	Annually	Standard Method
SO _x	Annually	Standard Method
Combustion Efficiency	Annually	Standard Method
Carbon Monoxide (CO)	Once every three years	Standard Method

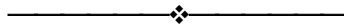
Note 1: Monitoring of emission point A1-2 (back-up boiler) shall take place when the boiler is in operation.



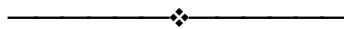
Emission Point Reference No: A2-1 to A2-4, A2-6 to A2-13, A2-15 to A2-23, A2-26, A2-30A to A2-42, A2-45A to A2-46C, A2-48 and A2-49.

Parameter	Monitoring Frequency ^{Note 1}	Analysis Method/Technique
Flow	Annually	Flow meter
Total Particulates	Annually	Isokinetic/Gravimetric/Standard Method

Note 1: Monitoring of dryers shall take place during harvest season (July – October).

**C.2.1. Control of Emissions to Water**

There shall be no emissions to water of environmental significance.



C.2.2. Control of Storm Water Emissions**Integrated Constructed Wetland**

Emission Point Reference No: SW1A (outlet from ICW) and SW1B (inlet into ICW)
Description of Treatment: Integrated Constructed Wetland

Control Parameter	Monitoring	Key Equipment ^{Note 1}
Flow and flow patterns	Continuous for inlet flow to the ICW and discharge flow from the ICW. Daily visual inspection for flow and flow patterns within the ICW cells.	Flow regulators Flow meters Shut off valve at discharge Cell isolation.
Visual inspection cell embankment integrity, weed growth and pipework defects	Daily	N/A
Water depths and turbidity in final cell.	Daily	Appropriate measuring equipment
Sediment depth, vegetation and invertebrate monitoring	Quarterly	Appropriate measuring/monitoring equipment
Sediment composition ^{Note 2}	Annually	Appropriate sampling equipment

Note 1: The licensee shall maintain appropriate access to standby and/or spares to ensure the operation of the abatement system.

Note 2: Sediment shall be sampled and analysed for parameters as required by, or as approved by, the Agency.

**C.2.3. Monitoring of Emissions to Water**

There shall be no emissions to water of environmental significance.

**C.2.4. Monitoring of Storm Water Emissions**

Emission Point Reference No: SW1A (outflow ICW)(268355E 154523N)
 SW1B (inflow ICW) ^{Note 1}

Parameter	Monitoring Frequency	Analysis Method/Technique
Visual Inspection	Daily	Sample and examine for colour and odour.
Flow	Continuous	On-line flow meter with recorder.
pH	Weekly	Standard method
Suspended Solids	Weekly	Standard method
Conductivity	Weekly	Standard method
COD	Monthly	Standard method
BOD	Monthly	Standard method
Total Ammonia	Monthly	Standard method
Total Nitrogen	Monthly	Standard method
Orthophosphate	Monthly	Standard method
Other parameters as may be required by the Agency	As may be required	To be approved by the Agency

Note 1: Co-ordinates of monitoring point SW1B shall be provided to the Agency for approval within one month of date of grant of this licence.

C.3.1. Control of Emissions to Sewer

There shall be no process effluent emissions to sewer.

C.3.2. Monitoring of Emissions to Sewer

There shall be no process effluent emissions to Sewer.

C.4 Noise Monitoring

Location	Measurement	Frequency ^{Note 2}
NSL01 NSL02 NSL03 NSL04 Locations at the boundary of the SAC (002162)^{Note 1} Any other locations as approved by, or as required by, the Agency	LAeq, T LA90 LA10 1/3 Octave Band Analysis	Annually
Period	Minimum Survey Duration	
Daytime	A minimum of 3 sampling periods at each noise monitoring location ^{Note 3}	
Evening-time	A minimum of 1 sampling period at each noise monitoring location.	
Night-time ^{Note 4}	A minimum of 2 sampling periods at each noise monitoring location.	

Note 1: Monitoring locations at the boundary of the SAC as approved by, the Agency.

Note 2: Monitoring event shall be undertaken during the harvest period July – October.

Note 3: Sampling period is to be the time period T stated as per *Schedule B.4 Noise Emissions, of this licence*. This applies to day, evening and night time periods.

Note 4: Night-time measurements should be made between 2300hrs and 0400hrs, Sunday to Thursday, with 2300hrs being the preferred start time.

C.5 Ambient Monitoring

Air Monitoring Location:

D1, D2, D3, D4 ^{Note 1 & 2}

Parameter	Monitoring Frequency	Analysis Method/Technique
Dust deposition	Quarterly	Bergerhoff (Standard Method)

Note 1: Air monitoring locations shall be submitted to the Agency for approval within one month from the date of grant of this licence.

Note 2: Monitoring locations may be amended as approved by, or as required by, the Agency.

Groundwater Monitoring

Location: Well No. GW1 (water abstraction well) and additional monitoring locations as approved by the Agency in accordance with Condition 6.18 ^{Note 1}.

Parameter	Monitoring Frequency	Analysis Method/Techniques
Water level	Annually	Interface probe
pH	Annually	pH electrode/meter
Conductivity	Annually	Standard Method
COD	Annually	Standard Method
Nitrate	Annually	Standard Method
Total Ammonia	Annually	Standard Method
Total Nitrogen	Annually	Standard Method
Total Phosphorus	Annually	Standard Method
Orthophosphate	Annually	Standard Method
Relevant Hazardous Substances ^{Note 2}	Every five years	Standard Method

Note 1: Monitoring locations may be amended as approved by, or as required by, the Agency.

Note 2: Groundwater monitoring for relevant hazardous substances shall be in accordance with Condition 6.20.



Receiving Water Monitoring

Locations: Upstream and downstream of the installation boundary on the River Barrow. ^{Note 1}
Downstream of the ICW discharge point on the River Barrow. ^{Note 1}

Parameter	Monitoring Frequency	Analysis Method/Techniques
Biological Quality (Q) Rating/Q Link	Annually ^{Note 2}	To be approved by the Agency
Chemical monitoring ^{Note 3}	Quarterly	Standard Method

Note 1: Monitoring point locations as approved by, or as required by, the Agency.

Note 2: Monitoring period – June to September.

Note 3: Monitoring parameters as required by, or as approved by, the Agency.



Soil Monitoring

Location: Monitoring location(s) as approved by, or as required by, the Agency.

Parameter	Monitoring Frequency	Analysis Method/Techniques
Relevant hazardous Substances ^{Note 1}	Every ten years	Standard Method

Note 1: Soil monitoring for relevant hazardous substances shall be in accordance with Condition 6.20.



SCHEDULE D: Annual Environmental Report

Annual Environmental Report Content <small>Note 1 & 2</small>
Environment Management objectives and targets summary. Energy and water use and generation summary. Complaints summary. Incidents Summary. Emissions Summary. Waste Management Summary. Any other items specified in the licence conditions or by the Agency.

Note 1: Content may be revised subject to the approval of the Agency.

Note 2: The AER shall be completed in accordance with current Agency guidance.



Signed on behalf of the said Agency _____

On the xx day of xxxxx, 202X xxxxxxxxxxxx **Authorised Person**